

## **IN THE SPECIFICATION**

Please amend paragraph [0030] as follows:

[0030] With AutoHelper, a compiler is able to automatically generate prefetching helper threads for Hyper-Threading machines. The helper threads aim at bringing the latency-hiding benefit of multithreading to sequential workloads. Unlike threads produced by the conventional parallelizing compilers, the helper threads only prefetch for the main thread, which does not reuse the computed results from the helper threads. According to ~~an~~one embodiment, the program correctness is still maintained by the main thread's execution, while the helper threads do not affect program correctness and are used solely for performance improvement. This attribute permits the use of more aggressive forms of optimization in generating helper threads. For example, when the main thread does not need help, certain optimizations may be performed, which are not possible with conventional throughput threading paradigm.